

**BY ORDER OF THE COMMANDER
45TH SPACE WING**

45TH SPACE WING INSTRUCTION 40-103

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Medical Command

**AUTOMATED EXTERNAL
DEFIBRILLATOR (AED) PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Col Allison Bowden)

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This instruction was introduced by AFSPC/CV letter dated 28 May 1999, and implemented by 45 SW/CC letter dated 29 June 1999, and provides guidelines and describes oversight for the management and use of the Automated External Defibrillator (AED) at facilities within the 45th Space Wing. Refer recommended changes and questions about this publication to the OPR listed above using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate chain of command. Requests for waivers must be submitted to the OPR listed above, or as otherwise stipulated within this publication, for consideration and approval. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This publication contains minor revisions. As AED units are upgraded once they reach their recommended lifespan, the revision contains verbiage to allow for flexibility on frequency of unit maintenance inspections based on manufacturer's recommendations. Attachment 2 has been modified to reflect this new maintenance schedule; it also contains more specific information to include owning organization/section, Public Access Defibrillator (PAD) location, and Site

Coordinator. Attachment 3 has been added as a template for monthly inspection reporting to the 45th Medical Group (45 MDG) allowing for a single document covering all unit AEDs.

1. General.

1.1. Background: The American Heart Association estimates that approximately 220,000 people die each year from sudden cardiac arrest (more than 600 deaths a day). About 75-80 percent of these events occur beyond the grounds of a medical facility, and are due to a condition called ventricular fibrillation. “V-fib” results from disruption of the normal electrical impulses within the heart. When these impulses are out of synchronization, the heart’s ability to pump blood completely ceases, and every organ system of the body starves for oxygen. Brain cells begin to die almost immediately. For every minute that passes without defibrillation (shocking the heart), a victim’s chance of survival decreases by 7-10 percent, and defibrillation is the only way to restore the heart’s ability to pump blood. Emergency medical service (ambulance) response times average about 12 minutes. If we relied on EMS, we would expect overall survival rates of less than 2 percent for victims of V-fib. A properly deployed AED program makes it possible for non-medical personnel to perform defibrillation for these victims. This capability greatly improves their chance of survival.

1.2. Prerequisites: The essential key to a successful AED program is early defibrillation. Therefore, AEDs will be strategically placed throughout the 45 SW as recommended by the program medical director to reduce time between victim collapse and the ability to provide initial shock, if indicated.

1.2.1. Factors that will be considered in determining AED placement in unit facilities or facility assets include:

1.2.1.1. Unit’s general mission.

1.2.1.2. Number of occupants or “customers” frequenting the building or area.

1.2.1.3. Approximation of cardiac event risk for that population (older people, occupational or environmental risks such as job tasks involving work with electricity, strenuous physical activity, etc.).

1.2.2. 45 SW units should contact the AED Program Medical Director (see paragraph 2.3 below) by calling 494-8100 or 494-8578 for guidance regarding justification, logistical and training issues prior to ordering an AED unit. Additionally, when an AED unit approaches the end of its serviceable period (due for replacement), the AED Program Medical Director should be re-consulted to assess continued need. This approval practice helps ensure deployment of uniform AED models, training and maintenance protocols, and helps keep the 45 SW program manageable and effective.

1.3. It is important to note that the participating 45 SW units are directly and solely responsible for their AED programs (purchasing, installing and user-level maintenance of equipment, personnel proficiency, designation of key personnel, etc.). The 45 MDG serves the units in a purely advisory capacity while providing global program oversight for 45 SW/CC.

2. Responsibilities.

2.1. **The 45 SW/CC.** The wing commander has the overall responsibility for the AED Program and directs the 45 MDG/CC to ensure proper medical objectives are maintained for the AED Program.

2.2. **The 45 MDG/CC.** The 45 MDG/CC is responsible to the 45 SW/CC for sustainment of the AED Program. The 45 MDG/CC will ensure all medical objectives are maintained and provide professional guidance on program administration. The 45 MDG/CC will appoint in writing a Medical Director and Program Coordinator for the AED Program.

2.3. Unit/CC will appoint a site coordinator and ensure overall compliance with training, maintenance and documentation for the unit AED program. Unit/CC will allocate funding for purchase of AEDs to include supplies and routine maintenance for any unit facilities determined to be “at risk” (see paragraph 1.2 above).

2.4. **Medical Director.** The Medical Director will be a credentialed medical provider proficient and current in Basic and Advanced Cardiac Life Support. The Medical Director is responsible for formulation of AED deployment strategies (where, how many), and has approval authority for AED deployment to a unit requesting this capability. The Medical Director will provide oversight of the training and proficiency testing provided by the Program Coordinator. The Medical Director will review all event summary sheets within 1 business day of AED use (see paragraph 4 below).

2.5. **Program Coordinator.** The Program Coordinator must be a Basic Life Support (BLS) Program Director (previously known as “Instructor Trainer”) and is responsible for monitoring 45 SW AED training and program compliance. The Program Coordinator will maintain a current roster of all primary and alternate site coordinators and ensure that they are conducting unit training according to Military Training Network (MTN) standards. The Program Coordinator will ensure AED proficiency (including adult CPR) at each location through periodic testing which can be coordinated with facility fire drills in an effort to minimize mission disruption. The Program Coordinator works in concert with the Medical Director to address medical oversight issues and any irregularities that arise.

2.5.1. **Unit Inspections.** The Program Coordinator will conduct a staff assistance visit (SAV) no less than once every 2 years and provide the Unit/CC with a copy of the report outlining any notable areas of concern.

2.6. **Site Coordinators.** Units possessing an AED will designate a primary and alternate Site Coordinator appointed in writing by the unit commander. Each unit is responsible for providing an updated appointment letter to the Program Coordinator if there are any changes.

2.6.1. **Training Requirements.** Site Coordinators must successfully complete all training requirements as established by the Program Coordinator, and will be responsible for identifying and training all Targeted Responders (see paragraph 2.7-2.7.2) within their unit.

2.6.2. **AED Location and Marking.** The Site Coordinator will determine the placement of the AED (Program Coordinator can offer assistance) and ensure proper signs are posted directing rescuers to the AED unit. The location of the AED will also be marked on the facility fire evacuation plans. Attachment 2 contains a list of suggested additional

equipment items to be kept with the AED. These items are not mandatory, but are strongly recommended for an effective, safe program. The 45 MDG Medical Logistics (45 MDSS/SGSL, 494-7085) can offer assistance in obtaining these or similar items.

2.6.3. AED Routine Maintenance and Inspections. Site Coordinators will ensure periodic operational checks are conducted as recommended by the manufacturer. Site coordinators will follow the procedure outlined in the PAD Maintenance Log, Attachment 3. Site coordinators will maintain completed copies of the PAD Maintenance Log for 2 years. A monthly PAD Program Report (Attachment 3) covering all unit AEDs will be submitted to 45 MDG to ensure compliance.

2.6.4. AED Emergency Response Plan. Site Coordinators will develop their unit's AED emergency response plan and forward the plan through their commander for approval.

2.7. Targeted Responders. Targeted responders are personnel designated by the Site Coordinator as those likely to be in the vicinity of the AED unit when a victim is in need. Encourage all Airmen to become targeted responders.

2.7.1. Training Requirements. Targeted responders will, as a minimum, successfully complete the American Heart Association (AHA) Heartsaver AED course and receive a certification card. This training is offered monthly for all 45SW personnel to include contractors through the 45MDG at no cost to the unit. Training can be scheduled by calling 494-8200. Certification must be renewed every 2 years. Currency of the certifications is the responsibility of the Site Coordinator. Unit training as a group builds a better sense of team responsibility than individual, separate training. Ideally, each unit would maintain a least one CPR instructor.

2.7.2. Administrative Requirements. An Event Summary Sheet (Attachment 5) must be completed by the individual who used the AED on a victim. This form must be forwarded to the Medical Director within 1 duty day of the event via encrypted e-mail to 45MDG.aed@us.af.mil.

3. AED Acquisition and Maintenance.

3.1. Work centers requesting an AED will coordinate the request through the chain of command. The request will be sent in memorandum format to the 45 MDG Program Coordinator who staffs the request through the Medical Director for approval/disapproval. The Medical Logistics Flight will be the focal point for all AED acquisitions. Funding will be a unit responsibility. All AEDs will be gained on the 45 MDG equipment inventory. The item will be gained under the cost center of the owning unit.

3.2. The 45 MDG Biomedical Equipment Repair (45 MDSS/SGSLE, 494-6134) will serve as the point of contact for any problems or technical questions regarding approved AEDs. Additionally, Biomedical Equipment Repair will be responsible for any inspections or maintenance beyond the technical ability of the Site Coordinator.

4. Actual Event Quality Assurance.

4.1. The Medical Director or designee, with the assistance of the 45th Space Wing Staff Judge Advocate or designee and 45 MDG Chief of Clinical Services will review all Event Summary Sheets to ensure quality of care was in compliance with local Standard of Care, and applicable Federal and Florida statutory requirements within 2 duty days of the event.

ROBERT J. PAVELKO, Colonel, USAF,
Vice Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****Adopted Forms***

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AED—Automated External Defibrillator

AHA—American Heart Association

BLS—Basic Life Support

CPR—Cardiopulmonary Resuscitation

MDG—Medical Group

MTN—Military Training Network

PAD—Public Access Defibrillator

SAV—Staff Assistance Visit

Attachment 2

ADDITIONAL RECOMMENDED EQUIPMENT LISTING

A2.1. Non-latex protective gloves.

A2.2. CPR face mask/shield.

A2.3. Disposable razors to dry shave a victim's chest area if required.

A2.4. Bandage Scissors.

A2.5. Spare battery and electrode pads.

A2.6. Biohazard/medical waste container/bags.

A2.7. Pad of paper and pens.

A2.8. Absorbent towel.

A2.9. Surface-Mounted AED Cabinet or Semi-Recessed AED Cabinet.

A2.10. AED Location Wall Sign. **NOTE:** Please Contact 45th Medical Group Medical Logistics (45 MDSS/SGSL) at 494-7085 for assistance in obtaining these or similar items.

Attachment 3

PAD MAINTENANCE LOG

Figure A3.1. PAD MAINTENANCE LOG

Public Access Defibrillator Maintenance Log		
This log is to certify that all inspections and maintenance actions were conducted per the AED's Operating Manual for the month indicated below. Do not attempt any repairs or modify equipment in any way.		
Owning Organization/Department		
AED Location (Bldg, Flr, Rm)		
Site Coordinator Name/Phone		
Equipment Control No. (ECN)		
AED Model No.		
AED Serial No.		
Electrode Expiration Date		
Battery Installation date		

2012	Inspections Completed?	Certified By	Notes/Comments
Jan	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Feb	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Mar	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Apr	Yes <input type="checkbox"/> No <input type="checkbox"/>		
May	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Jun	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Jul	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Aug	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Sep	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Oct	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Nov	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Dec	Yes <input type="checkbox"/> No <input type="checkbox"/>		

General Maintenance Actions (For detailed maintenance instructions reference the Operator's Manual for your AED)

Ensure unit is ready for use. Verify AED status indicator

Verify electrodes and batteries have not expired. Replace if needed.

Visually inspect AED for any signs of damage.

Verify accessories are in serviceable condition and readily available (e.g. razor, scissors, gloves, pads).

For POWERHEART AED G3+ Owners. "Audible Maintenance Indicator"

When the daily, weekly, or monthly self-test determines service is required, an audible beep is sounded every 30 seconds until the lid is opened or the battery power is depleted. Opening and closing the lid may deactivate the beep. If the error is not corrected by the next automatic self-test, the beep will be reactivated.

For Service & Maintenance Questions	For Assistance With Supplies	For PAD Program & Training Questions
Biomedical Equipment Maintenance Com. (321) 494.6134 Bldg. 1388 45MDGBioM@us.af.mil	Medical Supply Com. (321) 494.7084 Bldg. 1372	Medical Education & Training Com. (321) 494.8854 Bldg. 1370 45MDG.aed@us.af.mil

THIS LOG WILL BE VERIFIED ANNUALLY. PLEASE DO NO DISCARD.

Attachment 4

MONTHLY PAD PROGRAM REPORT

Figure A4.1. MONTHLY PAD PROGRAM REPORT



DEPARTMENT OF THE AIR FORCE
45 SPACE WING (AFSPC)

[DATE]

MEMORANDUM FOR PUBLIC ACCESS DEFIBRILLATOR PROGRAM COORDINATOR

FROM: YOUR ORGANIZATION

SUBJECT: Monthly PAD Program Report

1. This is to certify that all AEDs under my purview have been inspected IAW SWI40-103. Please note the following findings below:

Findings: All AEDs to include electrodes and batteries have been found in serviceable condition.

2. There have been no changes to the Unit Site Coordinator or the Unit Targeted Responder List. I understand that if such changes are needed, I will submit the required paperwork to the PAD Program Coordinator.

FIRST MI. LAST, RANK, USAF
TITLE

GUARDIANS OF THE HIGH FRONTIER

Attachment 5

EVENT SUMMARY SHEET

Figure A5.1. Event Summary Sheet

EVENT SUMMARY SHEET

Location of event: _____

Date of event: _____ Time of event: _____

AED Oversight Physician: _____

AED Program Coordinator: _____

Victim's name: _____

Was the event witnessed or non-witnessed? **Witnessed / Non-Witnessed**

Name of trained rescuer(s): _____

Internal response plan activated? **YES / NO**

Was 9-1-1 called? **YES / NO**

Time of EMS arrival: _____

Was pulse taken at initial assessment? **YES / NO**

Was CPR given before the AED arrived? **YES / NO**

If yes, name(s) of CPR rescuer(s): _____

Were shocks given? **YES / NO**

Total number of shocks _____

Did victim: Regain a pulse? **YES / NO**
 Resume breathing? **YES / NO**
 Regain consciousness? **YES / NO**

Was the procedure for transferring patient care to the emergency medical team executed? **YES / NO**

Comments/Problems encountered: _____

 Printed name of person completing form

 Signature Date Duty Phone/Contact Number

SCAN AND SEND COMPLETED FORM TO 45MDG.aed@us.af.mil (who will then forward the document to the AED Program Medical Director) for review/coordination.